

CLAIMS:

1. A standby circuit for an electrical device (40) having
- one or more signal inputs (3, 4, 5) and
- a control unit (28) and
- a control output (8) for the control of a power supply unit (42),
5 - in which the control unit (28) initiates an activation procedure on the
occurrence of a predefined activation event at the signal input (3, 4, 5),
- in which a signal to switch on a power supply unit (42) is generated at the
control output (8).
- 10 2. A standby circuit as claimed in claim 1, in which one of the signal inputs is a
useful signal input (4) for a useful signal of an electrical device (40).
3. A standby circuit as claimed in one of the preceding claims, in which one of
the signal inputs is a switch input (3) for the connection of a button.
- 15 4. A standby circuit as claimed in one of the preceding claims, in which one of
the signal inputs is a remote control input (5) for the signals from a wireless remote control.
5. A standby circuit as claimed in claim 4, in which the signal input (5) for the
20 connection of an infrared sensor element (54) is suitable for the detection of the signals from
an infrared remote control.
6. A standby circuit as claimed in one of the preceding claims, in which one of
the signal inputs is a digital data input, which can be connected to any digital interface, such
25 as computer networks.
7. A standby circuit as claimed in one of the preceding claims, in which a store
(30) is provided.

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8. A standby circuit as claimed in one of the preceding claims, in which a clock (26) is provided.

9. A standby circuit as claimed in claim 8, in which
- the control unit (28) performs a time switch function,
- in which an activation time is preset,
- and the activation procedure is initiated on reaching the activation time.

10. A standby circuit as claimed in one of the preceding claims, in which one or more clock inputs (6, 7) are provided.

11. A standby circuit as claimed in one of the preceding claims, in which one or more communication terminals (9, 10) are provided for sending and/or receiving data to/from the control unit (28) and/or the store (30).

12. A standby circuit as claimed in one of the preceding claims, in which the circuit (ZPS) is constructed as a single integrated component.

13. A standby circuit as claimed in one of the preceding claims, in which the control unit (28) forwards the signals arriving at the remote control input (5) via a communication terminal (9, 10).

14. A standby circuit as claimed in one of the preceding claims, in which
- a store stores remote control activation signals,
- the control unit (28) compares signals arriving at the remote control input (5) with the stored activation signals,
- and if they match initiates the activation procedure.

15. An electrical device with
- one or more functional units (46)
- and a power supply unit (42) for connection to a power supply (44) and for feeding the functional units (46) with electrical energy,
characterized in that
- the device (40) is switchable into a power-down mode,

- in which the power supply unit (42) is switched off,
- while a standby circuit (ZPS) remains active,
- which switches on the power supply unit (42) of the device (40) at the occurrence of an activation event.

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16. An electrical device as claimed in claim 15 comprising a standby circuit (ZPS) as claimed in one of the claims 1 - 14.

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17. An electrical device as claimed in one of the claims 15 or 16, in which
- a power supply circuit (76) is provided for supplying electrical energy to the standby circuit (ZPS),
 - while the power supply circuit draws electrical energy directly from the electricity power grid.

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18. An electrical device as claimed in one of the claims 15 or 17, in which an energy store (50) is provided for supplying electrical energy to the standby circuit (ZPS).

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19. An electrical device as claimed in claim 18, in which
- the energy store is a rechargeable element (58, 72),
 - while the energy store is charged when the power supply unit (42) is switched on.

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20. An electrical device as claimed in claim 19, in which
- the control unit (28) of the standby circuit (ZPS) is programmed when the device (40) is switched to the power-down mode so that,
 - after a predetermined period of time the device (40) is switched back to the power-up mode, so that the energy store (58, 72) is charged again,
 - while the period of time is calculated so that the rechargeable element (58, 72) supplies sufficient electrical energy for the operation of the standby circuit for this period of
- 30 time.

21. An electrical device as claimed in one of the claims 15 - 20, or a standby circuit as claimed in one of the claims 1-14, comprising a circuit for monitoring the remaining content of the energy store (50).

22. A method for the control of an electrical device, in which
- an electrical device (40), which has one or more functional units (46) and at least one power supply unit (42) for feeding the functional units (46) with electrical energy,
 - 5 - is switched from a power-up mode to a power-down mode,
 - while at least one power supply unit (42) is switched on in the power-up mode and all the power supply units (42) are switched off in the power-down mode,
 - but while a standby circuit (ZPS) remains active in the power-down mode,
 - which standby circuit (ZPS) monitors one or more signal inputs (3, 4, 5) for
 - 10 the occurrence of an activation event,
 - and which switches the device (40) from the power-down mode to the power-up mode again at the occurrence of an activation event.
23. A method as claimed in claim 22, in which
- 15 - the initiating activation event is stored in the standby circuit (ZPS),
 - and is interrogated after the device (40) has been switched on.
24. A method as claimed in one of the claims 22 or 23, in which
- the standby circuit (ZPS) is programmed by way of a communication
 - 20 interface,
 - while there is set which of the events occurring at the inputs should represent activation events.
25. A power supply assembly for an electrical device comprising
- 25 - a power supply unit (42),
- characterized in that
- switching means (66, 70) are provided for switching the power supply unit (42) on and off,
 - and a standby circuit (ZPS) having one or more signal inputs (3, 4, 5) is
 - 30 provided,
 - while the standby circuit (ZPS) is active when the power supply unit (42) is switched off and, at the occurrence of an activation event at one of the signal inputs, controls the circuit element (66, 70) so that the power supply unit (42) is switched on.